

9800375

HHE UNIVIED STAYIES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Resource Seeds, Inc.

Thorras, there has been presented to the

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, WE CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN ADJUCTING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY ECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

TRITICALE

'815'

In Testimon Mixerest, I have hereunto set my hand and caused the seal of the Floris Institute of the State City of Washington, D.C. this tenth day of June, in the year two thousand two.

Attest:

GCM July

"Commissioner Plant Variety Protection Office Agricultural Marketing Service intereman

REPRODUCE LOCALLY. Include form number and date on all reproductions. U.S. DEPARTMENT OF ACRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY DIVISION - PLANT VARIETY PROTECTION OFFICE APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE (Instructions and information collection burden statement on reverse) 1. NAME OF APPLICANT(S) (as it is to appear on the Certificate) Resource Seeds: Inc. 4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)	Application is required in order	FORM APPROVED - OMB NO. 0581-00 Inde in accordance with the Privacy Act perwork Reduction Act (PRA) of 1995, Ito determine if a plant variety protection C. 2421). Information is held confidention C. 2426). 3. VARIETY NAME 815
APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE (Instructions and information collection burden statement on reverse) 1. NAME OF APPLICANT(S) (as it is to appear on the Certificate) Resource Seeds: Inc. 4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)	certificate is to be issued (7 U.S. ountil certificate is issued (7 U.S. of the certificate is to be issued (7 U.S. ountil certificate is issued (7 U.S. o	C. 2421). Information is held confidenti 2426). 3. VARIETY NAME
1. NAME OF APPLICANT(S) (as it is to appear on the Certificate) Resource Seeds: Inc. 4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME
Resource Seeds Inc. 4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)	EXPERIMENTAL NUMBER	
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)	RSI 815	915
		013
	1	
2200 Hadray Br W	5. TELEPHONE (include area code)	FOR OFFICIAL USE ONLY
2200 Hoelron D 17-		PVPO NUMBER
2280 Hecker Pass Hwy.	408-847-1051	9800375
Gilroy, CA 95020	6. FAX (include area code)	F DATE
	100 047 0504	alu haa
	408-847-0604	9/16/1998
7. GENUS AND SPECIES NAME 8. FAMILY NAME (Boton)	icall	Flung and examination fee:
Triticosecale Wittmack		E : 2, 450
Graitmeae	•	1 c l
9. CROP KIND NAME (Common name)		T s PATE
Triticale		9/16/1998
10. IF THE APPLICANT NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnersh	ip, association, etc.) (Common name)	C CERTIFICATION FEE:
Corporation	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	320.00
11. IF INCORPORATED, GIVE STATE OF INCORPORATION	12. DATE OF INCORPORATION	E DATE
California	0-1-1 1 1000	9 4-11-2002
13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION A	October 1, 1990	<u> </u>
Dr. George Fohner	IND RECEIVE ALL PAPERS	14. TELEPHONE (include area code)
Resource Seeds, Inc.		408–847–1051
p.O. Box 1319		15. FAX (include area code)
Gilroy, CA 95021		
		408-847-0604
16. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse)		
a. Exhibit A. Origin and Breeding History of the Variety		
b. 😡 Exhibit B. Statement of Distinctness		
c. Description of the Variety		
d. Exhibit D. Additional Description of the Variety (Optional)		
e.		
f. Voucher Sample [2,500 viable untreated seeds or, for tuber propagated varieties verification that tis	sue culture will be deposited and maintaine	d in an approved public repository)
G. Filing and Examination Fee (\$2,450), made payable to "Treasurer of the United States" (Mail to PVF		
17. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY, AS A YES III "yes," answer items 18 and 19 below!	CLASS OF CERTIFIED SEED? (See Section of item 20)	5 83(a) of the Plant Variety Protection Act)
8. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?	IF "YES" TO ITEM 18, WHICH CLASSES (DF PRODUCTION BEYOND BREEDER SEED?
☐ YES ☐ NO	☐ FOUNDATION ☐ REGISTERED	CERTIFIED
(X) HAS THE VARIETY OR A HYBRID PRODUCED FROM THE VARIETY BEEN RELEASED, USED, OFFERED FOR EXTENSIVE PRIOR TO SEE 1998 Trials and	SALE, OR MARKETED IN THE U.S. OR O'	THER COUNTRIES?
1998 trials and	seed multiplication	seu for demonstration under contractual
itroi of two companies licensed by Resource Seeds to	test and multiply se	ed.
1. The applicant(s) declare that a viable sample of basic seed of the variety will be furnished with application and	d will be seelestabled were seened to	lance with such regulations as may be
Table Edition Will be deposited in a public repository and maint	tained for the duration of the certificate.	
The undersigned applicant(s) is(are) the owner(s) of this sexually reproduced or tuber propagated plant variety Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act	, and believe(s) that the variety is new, dis	tinct, uniform, and stable as required in
Applicant(s) is(ere) informed that false representation herein can jeopardize protection and result in penalties.		
GNATURE OF APPLICANT (0) net(s)) SIGNATURE	OF APPLICANT (Owner(s))	gradici de la mendració eneglica de la
/ Wu of ohm		andropa in Territoria de la Compania del Compania del Compania de la Compania del Compania de la Compania de la Compania del Compania de la Compania del Compania de la Compania de la Compania de la Compania del Compania de la Compania de la Compania de la Compania de la Compa
MAME (Please print orkype) NAME (Please	se print or typel	
George Fohner		solderwith the content facilities generally by
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APACITY OR TITLE your copy of the same and a same many DATE of the CAPACITY C	OR TITLE CONTRACTOR (CONTRACTOR CONTRACTOR) Response to the contractor of the contra	

Exhibit A Origin and Breeding History Triticale "815"

Triticale "815" originated from a three-way cross, Lasko 201/C463//A313, made in Hollister, CA in 1987. Lasko is a midtall triticale variety developed in Poland and at one time widely grown in Europe. Lasko 201 was a line developed by chemical mutation of Lasko by Dr. Stanislaw Nalepa, the breeder of "815". C463 is a triticale line developed by Dr. Tadeuse Wolski, cereal breeder of the Polish State Plant Breeding Institute. C463 was not released as a variety but was retained for breeding purposes as part of Dr. Wolski's triticale collection at Laski Breeding Station. In 1985, seed of C463 was provided by Dr. Wolski to Dr. Charles Jenkins, whose triticale breeding program and germplasm collection including the C463 accession was later acquired by Resource Seeds, Inc. from Pioneer Hi-Bred International, Inc.. The triticale A313 is another breeding line purchased by Resource Seeds as part of the Jenkins breeding program. It was the result of a cross made by Dr. Jenkins in 1966 between two hexaploid triticale lines, X22536 and 6[T]B469. X22536 was a line in the triticale germplasm collection of CIMMYT (International Center for Improvement of Maize and Wheat). 6[T]B469 was a line in the Jenkins collection that resulted, we believe, from a cross between a CIMMYT spring-type wheat breeding line containing timopheevi cytoplasm and a winter-type hexaploid triticale line from the triticale collection at University of Manitoba.

Progeny of the three-way cross from which "815" originated were carried on as a modified bulk in the F2 and F3 generations. A single head to row selection was employed in the F4 and F5 generations. A single head was selected from the F5 head rows to fix the type. After production of the F6, one hundred (100) F7 rows were grown out to check uniformity and eliminate variants. "815" resulted from the bulk of those rows that were uniform and true to type.

815 includes a variant that constitutes approximately 3% of the population and that is five to ten cm taller than the norm.

The variety "815" has been observed to be uniform and stable over six generations of seed production.

Exhibit B Statement of Distinctness Triticale "815"

Triticale 815 is most similar to the triticale variety "Lasko". 815 differs from Lasko in maturity as reflected in heading an average of six (6) days earlier than Lasko (Table 1), and in being approximately eleven (11) cm shorter than Lasko (Table 2).

Table 1. Maturity of triticale "815" compared to "Lasko" triticale

		815 Heading	Lasko	Difference (days)	
Gilroy, CA	1998	04/23	04/29	(days)	-6
Hollister, CA	1997	04/22	04/28		-6
Gilroy, CA	1996	04/24	04/28		-4
Gilroy, CA Site 2	1996	04/24	04/30		-6
Hollister, CA	1995	04/24	04/30		-6
Hollister, CA Site 2	1995	04/23	04/28		-5
AVERAGE					-6

Statistically significant difference in maturity, $\,p$ <0.001 by Paired $\,t$ -Test

Table 2. Height of triticale "815" compared to "Lasko" triticale

e e e e e e e e e e e e e e e e e e e		815	Lasko	Difference
			cm	
Gilroy, CA	1998	116	127	-11
Hollister, CA	1997	120	130	-10
Gilroy, CA	1996	115	127	-12
Hollister, CA	1995	120	132	-12
Average		118	129	-11

Statistically significant difference in height, p < 0.001 by Paired t-Test

ORM GR-470-33 (8/75)

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE GRAIN DIVISION HYATTSVILLE, MARYLAND 20782 OBJECTIVE DESCRIPTION OF VARIETY

EXHIBIT C (Triticale)

TRITICALE	
AME OF APPLICANT(S)	VARIETY NAME OR TEMPORARY DESIGNATION
Resource Seeds, Inc.	RSI 815
DDRESS (Street and No., or F.F.D. No., City, State, and ZIP Code)	FOR OFFICIAL USE ONLY
P.O. Box 1319	9800375
Gilroy, CA 95021	
Place the appropriate number that describes the varietal character of this variety in the Place a zero in first box (e.s. 089 or 09) when number is either 99 or less	or 9 or less.
1. GROWTH HABIT:	
3 1 = SPRING 2 = INTERMEDIATE 3 = WINTER	
Juvenile Plant Growth: 1 = PROSTRATE 2 = SEMIPROSTRATE	3 = ERECT
Photoperiod: 1 = INSENSITIVE 2 = SENSITIVE	
2. PLOIDY:	
1 = HEXAPLOID 2 = OCTOPLOID 3 = OTHER (Specify)	
4 2 2n CHROMOSOME NUMBER	
3. MATURITY (50% Flowering):	•
3 1 = VERY EARLY 2 = EARLY 3 = MIDSEASON 4 = 1	LATE 5 = VERY LATE
DAYS EARLIER THAN . LASKO 6	ARMACK 2 = ROSNER 3 = PATHFINDER
DAYS LATER THAN 4 = 6	TA 204 5 = ARMADILLA 6=LASKO
4. HEIGHT:	F 2 = SEMIDWARF 3 = SHORT
1 1 8 CM. HIGH IN CA 1 = DWAR 4 = MIDTA	* ***
1 1 cm. SHORTER THAN LASKO 6	ARMACK 2 = ROSNER 3 = PATHFINDER
CM. TALLER THAN	TA 204 5 = ARAMADILLA 6=LASKO
5. PLANT COLOR AT BOOT STAGE:	
2 1 = YELLOW GREEN 2 = GREEN 3 = BLUE GREEN	
6. STEM:	
1 Anthocyanin: 1 = ABSENT 2 = PRESENT	
3 Neck Hairiness: 1 = NONE 2 = SLIGHT 3 = MODERATE	4 = HEAVY
Shape Of Neck: 1 = STRAIGHT 2 = WAVY 3 = OTHER (S	pecify)
7. LEAVES:	
	. LEAF LENGTH: 1st Leaf Below Flag Leaf
2 Waxy Bloom On Leaf At Boot: 1 = ABSENT 2 = PRESENT 2 1 MM	I, LEAF WIDTH: 1st Leaf Below Flag Leaf
Leaf Carriage: 1 = UPRIGHT 2 = RECURVED 3 = DROOPING Awricle Col	or: 1 = COLORLESS OR WHITE 2 = PURPLE 3 = OTHER (Specify)

OBM GB-470-33 (Page 2) (Reverse)
8. HEAD:
2 Density: 1 = LAX 2 = MIDDENSE 3 = DENSE
Shape: 1 = FUSIFORM 2 = OBLONG 3 = CLAVATE 4 = ELLIPTICAL 5 = OTHER (Specify)
Awnedness: 1 = AWNLESS 2 = APICALLY AWNLETTED 3 = AWNLETTED 4 = AWNED
Awn Color: 1 = WHITE 2 = YELLOW 3 = TAN 4 = BROWN 5 = BLACK
1 3 CM. HEAD LENGTH 1 5 MM. HEAD WIDTH
9. GLUMES AT MATURITY:
Pubescence: 1 = GLABROUS 2 = SLIGHTLY PUBESCENT 3 = PUBESCENT
Color: 1 = WHITE 2 = YELLOW 3 = TAN 4 = BROWN 5 = BLACK
Length: 1 = SHORT 2 = MIDLONG 3 = LONG 2 Width: 1 = NARROW 2 = MIDWIDE 3 = WIDE
Shoulder: 1 = WANTING 2 = OBLIQUE 3 = ROUNDED 3 Beak: 1 = OBTUSE 2 = ACUTE 3 = ACUMINATE 4 = SQUARE 5 = ELEVATED 6 = APICULATE
10. COLEOPTILE COLOR:
2 1 = WHITE 2 = GREEN 3 = PURPLE
11. SEED:
3 Shape: 1 = OVATE 2 = OVAL 3 = ELLIPTICAL
Smoothness: 1 = SMOOTH 2 = SLIGHTLY WRINKLED 3 = WRINKLED
Brush Area: 1 = SMALL 2 = MIDSIZE 3 = LARGE
Brush Length: 1 = SHORT 2 = MIDLONG 3 = LONG
Phenol Reaction: 1 = IVORY 2 = FAWN 3 = LIGHT BROWN 4 = BROWN 5 = BROWN BLACK
Color: 1 = WHITE 2 = AMBER 3 = RED 4 = PURPLE 5 = BLACK 6 = OTHER (Specify)
5 5 GMS. PER 1,000 SEED
12. DISEASE (0 = Not Tested, 1 = Susceptible, 2 = Resistant, 3 = Tolerant):
STEM RUST (Races)
STRIPE RUST (Race) 0 ERGOT
POWDERY MILDEW 0 BACTERIAL STRIPE
3 SEPTORIA 3 YELLOW DWARF
OTHER (Specify)OTHER (Specify)
13. INSECT (O = Not Tested, 1 = Susceptible, 2 = Resistant, 3 = Tolerant): HESSIAN FLY RACE:
GREENBUG GP A B C
O CEREAL LEAF BEETLE D E G
OTHER (Specify)

14. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED:

CHARACTER		VARIETY	
PLANT TILLERING	LASKO	·	
WINTER HARDINESS	LASKO		
AREA OF ADAPTATION	102		
SEED SHAPE	JENKINS	:	

REFERENCES:

L. W. Briggle and L. P. Reitz, 1963, Classification of Triticum Species and Wheat Varieties Grown in the United States, Technical Bulletin 1278, USDA.

W. E. Walls, 1965, A Standardized Phenol Method for Testing Wheat Seeds for Varietal Purity, Contribution No. 28 to the handbook of seed testing prepared by the Association of Official Seed Analysts.

COMMENTS:

Exhibit D Additional Description Triticale "815"

The triticale variety "815" is a hexaploid, photoperiod-sensitive, winter-type triticale adapted to the Pacific Northwest, Southern Plains and Intermountain regions, and possibly Northeast. Its maturity is intermediate (midseason), reaching 50% heading approximately six (6) days earlier than the triticale variety "Lasko", and reaching 50% flowering approximately five (5) days earlier than Lasko. Its has good winterhardiness, though it is not as winterhardy as "102" or "Jenkins".

Coleoptiles of 815 are green and juvenile growth is semiprostrate. At boot stage, plant color is green and the leaves have a waxy bloom. Plant height of 815 at maturity is intermediate, approximately 11 cm shorter than Lasko and 40 cm shorter than 102, except for variants that have one or more tillers that are five to ten cm taller than the norm. 815 does not have anthocyanin in the stem. Auricles are colorless or white. Its neck is straight and moderately hairy. Leaf carriage is recurved; flag leaf is not twisted.

Heads of 815 are middense, fusiform, and fully awned. Awn color is white. Glumes at maturity are glabrous, white to brownish, long, and midwide. The shoulder of the glumes is wanting, and the beak is acuminate.

Seed of 815 is red, elliptical, and slightly wrinkled. The brush area is large, and its length is long. Seed weight is approximately 55 grams per 1000 under good growing conditions.

t d data on all concoductions	FORM APPROVED - OMB NO	0. 0561-0055 EXPIRES: 12-31-96
REPRODUCE LOCALLY. Include form number and date on all reproductions. U.S. DEPARTMENT OF AGRICULTURE		in accordance with the Privacy Act of
ACCIONATION MARKETING SERVICE	2	erwork Reduction Act (PRA) of 1995.
SCIENCE AND TECHNOLOGY DIVISION - PLANT VARIETY PROTECTION OFFICE	Application is required in order to	determine if a plant variety protection
EXHIBIT E	certificate is to be issued (7 U.S.C. until certificate is issued (7 U.S.C.	. 2421). Intermetion is hele commental
STATEMENT OF THE BASIS OF OWNERSHIP	·	
	2. TEMPORARY DESIGNATION	3. VARIETY NAME
1. NAME OF APPLICANT(S)	OR EXPERIMENTAL NUMBER	
	RSI 915	815
Resource Seeds, Inc.	RS1 815	013
	5. TELEPHONE (include area code)	6. FAX (include area code)
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)	1	10.15.0001
P.O. Box 1319	408/847-1051	408/847-0604
	7. PVPO NUMBER	トルのコアド
Gilroy, CA 95021	98	300375
8. Does the applicant own all rights to the variety? Mark an "X" in appropriate b	lock. If no, please explain.	YES NO
8. Does the approximation of		
	*	
9. Is the applicant (individual or company) a U.S. national or U.S. based company	y?	X YES NO
If no, give name of country		
10. Is the applicant the original breeder? If no, please answer the following:		X YES NO
 a. If original rights to variety were owned by individual(s): Is (are) the original breeder(s) a U.S. national(s)? If no, give name of 	country	
is (are) the original breeder(s) a 0.3. (lationalis): In 110, 3.00		
		TYES THO
•		YES NO
b. If original rights to variety were owned by a company:		
b. If original rights to variety were dwiled by a company? If no, give name of co	ountry	
Wanded use sources for extra spacel:		
11. Additional explantion on ownership (If needed, use reverse for extra space):		
		£.
THE PLAN NOWE.		
PLEASE NOTE:		
Plant variety protection can be afforded only to owners (not licensees) who meet	one of the following criteria:	
Plant variety protection can be anorded only to owners		- UDOV member country of national
1. If the rights to the variety are owned by the original breeder, that person must	t be a U.S. national, national of	a UPOV member country, or necons.
 If the rights to the variety are owned by the original breeder, that percentage of a country which affords similar protection to nationals of the U.S. for the s 	ame genus and species.	
Of a Constal Statement and		urst he U.S. based, owned by
2. If the rights to the variety are owned by the company which employed the ori	iginal breeder(s), the company m	ationals of the U.S. for the same
If the rights to the variety are owned by the company which employed the ore nationals of a UPOV member country, or owned by nationals of a country which are country which is a country which is a country which employed the ore	ch anores similar protection to it	
genus and species.		
		neet one of the above criteria.

3. If the applicant is an owner who is not the original breeder, both the original breeder and the applicant must meet one of the ab

The original breeder may be the individual or company who directed final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definition.

Public reporting burden for this collection of information is estimated to average 10 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information in formation. Send comments regarding this burden appearance of the collection of information in formation in the collection of information in the collection of informati 0581-0055 and form number in your letter.

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